

L15 ANSWER 1 OF 3 USPATFULL on STN
AN 2003:238823 USPATFULL
TI Disposal of fluoroform (HFC-23)
IN Gelblum, Peter Gideon, Philadelphia, PA, UNITED STATES
Rao, Velliyur Nott Mallikarjuna, Wilmington, DE, UNITED STATES
Noelke, Charles Joseph, Wilmington, DE, UNITED STATES
Herron, Norman, Newark, DE, UNITED STATES
PI US 2003166981 A1 20030904
AI US 2002-320143 A1 20021216 (10)
PRAI US 2001-341640P 20011218 (60)
DT Utility
FS APPLICATION
LREP E I DU PONT DE NEMOURS AND COMPANY, LEGAL PATENT RECORDS CENTER, BARLEY
MILL PLAZA 25/1128, 4417 LANCASTER PIKE, WILMINGTON, DE, 19805
CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 543

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the co-pyrolysis of
fluoroform and chlorodifluoromethane to form a mixture of useful
fluoroolefin and saturated HFCs, notably, tetrafluoroethylene and
hexafluoropropylene and CF.sub.3CHF.sub.2 and CF.sub.3CHFCF.sub.3,
respectively.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 2 OF 3 USPATFULL on STN
AN 1998:51883 USPATFULL
TI Method for coproducing difluoromethane and 1,1,1,2-tetrafluoroethane
IN Schirmann, Jean-Pierre, Paris, France
Hub, Serge, Villeurbanne, France
Lantz, Andre, Vernaison, France
PA Elf Atochem S.A., France (non-U.S. corporation)
PI US 5750810 19980512
WO 9625377 19960822
AI US 1997-875656 19970730 (8)
WO 1996-FR70 19960116
19970730 PCT 371 date
19970730 PCT 102(e) date
PRAI FR 1995-1859 19950217
DT Utility
FS Granted
EXNAM Primary Examiner: Ivy, C. Warren; Assistant Examiner: Dahlen, Garth M.
LREP Bell, Boyd & Lloyd
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 202

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the simultaneous manufacture of
difluoromethane (F32) and 1,1,1,2-tetrafluoroethane (F134a) by
pyrolysis of chlorodifluoromethane in the presence of hydrogen,
working at a temperature above 500° C. in the absence of any
catalyst or metal surface. Depending on the operating conditions chosen,
this process also makes it possible predominantly to manufacture either
F134a or F32.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 3 OF 3 USPATFULL on STN
AN 96:75104 USPATFULL
TI Carbonization of halocarbons

IN Webster, James L., Parkersburg, WV, United States
Jackson, Scott C., Kennett Square, PA, United States
PA E. I. Du Pont de Nemours and Company, Wilmington, DE, United States
(U.S. corporation)
PI US 5547653 19960820
AI US 1994-327760 19941024 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Straub, Gary P.; Assistant Examiner: Hendrickson,
Stuart L.
CLMN Number of Claims: 15
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 712
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Halocarbon is carbonized at a temperature of at least 600° C. in
the presence of excess hydrogen and the absence of water to obtain
carbon and anhydrous haloacid as the primary reaction products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 1 OF 4 USPATFULL on STN
AN 2002:55192 USPATFULL
TI Synthesis of perfluoroolefins
IN Gelblum, Peter Gideon, Philadelphia, PA, UNITED STATES
Herron, Norman, Newark, DE, UNITED STATES
Noelke, Charles Joseph, Wilmington, DE, UNITED STATES
Rao, Velliyur Nott Mallikarjuna, Wilmington, DE, UNITED STATES
PI US 2002032356 A1 20020314
AI US 2001-878540 A1 20010611 (9)
PRAI US 2000-218338P 20000714 (60)
US 2001-271387P 20010226 (60)
DT Utility
FS APPLICATION
LREP E I DU PONT DE NEMOURS AND COMPANY, LEGAL DEPARTMENT - PATENTS, 1007
MARKET STREET, WILMINGTON, DE, 19898
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1217

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A gold-lined **pyrolysis** reactor is used to **pyrolyze** compounds to form fluoroolefins like tetrafluoroethylene and hexafluoropropylene in high yield, with minimum to no formation of perfluoroisobutylene, chlorotrifluoroethylene, coke, salts, or polymer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 2 OF 4 USPATFULL on STN
AN 1998:51881 USPATFULL
TI Dehydrohalogenation processes
IN Cassel, Wendell Richard, Newark, DE, United States
Corbin, David Richard, West Chester, PA, United States
Rao, V.N. Mallikarjuna, Wilmington, DE, United States
PA E. I. du Pont de Nemours and Company, Wilmington, DE, United States
(U.S. corporation)
PI US 5750808 19980512
AI US 1996-677063 19960709 (8)
PRAI US 1995-1033P 19950711 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Shaver, Paul F.
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 355

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process is disclosed for the dehydrohalogenation of partially halogenated ethanes of the formula C.sub.2 H.sub.a Cl.sub.b F.sub.c where a is an integer from 1 to 4, b is an integer from 0 to 3 and c is an integer from 1 to 5 to produce olefins selected from the group consisting of C.sub.2 H.sub.a-1 Cl.sub.b-1 F.sub.c and C.sub.2 H.sub.a-1 Cl.sub.b F.sub.c-1. The process involves contacting C.sub.2 H.sub.a Cl.sub.b F.sub.c with a zeolite selected from the group consisting of NaX and CsY. Selective reaction of one isomer from a mixture of two isomers is disclosed as a means for purification of the relatively unreactive isomer. Also disclosed is a process for producing perfluorocyclobutane which involves contacting CHF.sub.2 CClF.sub.2 with such zeolites.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 3 OF 4 USPATFULL on STN
AN 95:110614 USPATFULL

TI Process for the manufacture of pentafluoroethane
IN Nappa, Mario J., Newark, DE, United States
Rao, V. N. Mallikarjuna, Wilmington, DE, United States
Williams, William R., Wilmington, DE, United States
PA E. I. Du Pont de Nemours and Company, Wilmington, DE, United States
(U.S. corporation)
PI US 5475167 19951212
AI US 1995-390599 19950217 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Lone, Werren B.
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 392

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process is disclosed for the preparation of pentafluoroethane from chlorotetrafluoroethane (the yield of pentafluoroethane is at least 50 mole percent based upon the amount of chlorofluoroethane reacted with HF) with particularly low levels of chlorofluoroethanes. The process involves providing sufficient pretreatment (where necessary) of a Cr.sub.2 O.sub.3 catalyst with at least one agent selected from the group consisting of CO, H.sub.2, H.sub.2 O and mixtures thereof in the gaseous state such that the total chlorofluoroethane content of said product stream is less than 1 mole percent. Certain high surface area catalysts may be used without such pretreatment.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 4 OF 4 USPATFULL on STN

AN 94:66673 USPATFULL
TI Process for the preparation of hexafluoropropene
IN Freudenreich, Reinhold, Burgkirchen, Germany, Federal Republic of
Mielke, Ingolf, Burgkirchen, Germany, Federal Republic of
Rettenbeck, Karl, Burgkirchen, Germany, Federal Republic of
Schottle, Thomas, Burgkirchen, Germany, Federal Republic of
PA Hoechst Aktiengesellschaft, Frankfurt am Main, Germany, Federal Republic
of (non-U.S. corporation)
PI US 5334783 19940802
AI US 1992-949348 19920922 (7)
RLI Continuation of Ser. No. US 1991-739732, filed on 30 Jul 1991, now
abandoned which is a continuation of Ser. No. US 1991-664465, filed on 1
Mar 1991, now abandoned which is a continuation of Ser. No. US
1990-488395, filed on 27 Feb 1990, now abandoned which is a continuation
of Ser. No. US 1989-321966, filed on 10 Mar 1989, now abandoned
PRAI DE 1988-3808437 19880314
DE 1988-3823370 19880709
DT Utility
FS Granted
EXNAM Primary Examiner: Siegel, Alan
LREP Connolly & Hutz
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 527

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for the preparation of hexafluoropropene by thermal cleavage of chlorotetrafluoroethane and/or chlorohexafluoropropane or a mixture of chlorotetrafluoroethane and perfluorocyclobutane at 600° to 1,000° C. and under a pressure of 1 to 1,000 kPa is described. The thermal cleavage is carried out in the presence of at least 0.05 mole of tetrafluoroethylene per mole of chlorotetrafluoroethane and/or chlorohexafluoropropane or mixture of chlorotetrafluoroethane and perfluorocyclobutane employed. By means of this process

hexafluoropropene is obtained for a small extra expenditure on apparatus at a good selectivity and in an improved space-time yield.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L26 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1993:65829 CAPLUS
DN 118:65829
TI Air contaminants
CS Occupational Safety and Health Administration, U. S. Dep. Labor,
Washington, DC, 20210, USA
SO Federal Register (1992), 57(114, Bk. 2), 26002-601, 12 Jun 1992
CODEN: FEREC; ISSN: 0097-6326
DT Journal
LA English
AB Proposed amendments of existing air contaminant stds. for the maritime and construction industries and extension of air contaminant stds. to agricultural employees (only employees of farms with >10 nonfamily employees are covered) are given under the Federal Occupational Safety and Health Administration. Tables that indicated transitional limits, based on established threshold limit values, indication of skin protection needs, proposed time-weighted average exposure (any 8-h work shift for 40-h week), short-term exposure limit (15-min time-weighted average), ceiling (exposure during any part of the work day, or if instantaneous monitoring is not feasible, the 15-min time-weighted average), and/or skin protection needs are given for the shipyard, marine terminal and longshoring, construction, and agricultural industries. Extensive data on health effects of the substances to be regulated and preliminary regulatory impact analyses are given for general industry and the specific industrial sectors.

L26 ANSWER 2 OF 3 USPATFULL on STN
AN 2001:235356 USPATFULL
TI Process for perfluorocyclobutane purification
IN Malikarjuna, V. N., Wilmington, DE, United States
PA E. I. du Pont de Nemours and Company, Wilmington, DE, United States
(U.S. corporation)
PI US 6333440 B1 20011225
AI US 2001-825748 20010404 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Siegel, Alan
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 595

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process is disclosed for obtaining octafluorocyclobutane of increased purity from a mixture comprising (a) octafluorocyclobutane and (b) at least one halocarbon impurity which is difficult to separate from octafluorocyclobutane by distillation (e.g., azeotropes of octafluorocyclobutane with such halocarbons). The process involves (1) contacting the mixture with a catalyst in the vapor phase in the presence HCl and/or HF at a temperature sufficient to react component (b) impurity with HCl and/or HF to provide a product mixture comprising halogenated product which is more easily separated from octafluorocyclobutane by distillation than the unreacted impurity; and (2) separating halogenated product obtained in (1) from octafluorocyclobutane by distillation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L26 ANSWER 3 OF 3 USPATFULL on STN
AN 1998:12186 USPATFULL
TI Process for producing tetrafluoromethane
IN Ohno, Hiromoto, Kanagawa, Japan
Nakajo, Tetsuo, Kanagawa, Japan
Arai, Tatsuharu, Kanagawa, Japan

Oh, Toshio, Kanagawa, Japan
PA Showa Denko K.K., Tokyo, Japan (non-U.S. corporation)
PI US 5714648 19980203
AI US 1996-630532 19960410 (8)
PRAI JP 1996-51932 19960308
DT Utility
FS Granted
EXNAM Primary Examiner: Siegel, Alan
LREP Sughrue, Mion, Zinn, Macpeak & Seas, PLLC
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 403

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for producing tetrafluoromethane which comprises reacting a hydrofluorocarbon containing one carbon atom in the molecule with fluorine gas at an elevated temperature in a vapor phase in the presence of a diluent gas.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L29 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1

AN 2002:72010 CAPLUS

DN 136:118850

TI Manufacture of perfluoroolefins using a gold-lined
pyrolysis reactor

IN Gelblum, Peter Gideon; Herron, Norman; Noelke, Charles Joseph; Rao,
Velliyur Nott Mall

PA E. I. Du Pont de Nemours & Co., USA

SO PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002006193	A2	20020124	WO 2001-US22234	20010713
	WO 2002006193	A3	20020725		
	W: CN, JP				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	US 2002032356	A1	20020314	US 2001-878540	20010611
	EP 1301453	A2	20030416	EP 2001-952749	20010713
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2004504283	T2	20040212	JP 2002-512100	20010713
PRAI	US 2000-218338P	P	20000714		
	US 2001-271387P	P	20010226		
	US 2001-878540	A	20010611		
	WO 2001-US22234	W	20010713		

AB A gold-lined **pyrolysis** reactor is used to
pyrolyze compds. to form fluoroolefins such as tetrafluoroethylene
and hexafluoropropylene in high yield, with min. to no formation of
perfluoroisobutylene, chlorotrifluoroethylene, coke, salts, or polymer.

L47 ANSWER 1 OF 1 USPATFULL on STN
AN 2004:2598 USPATFULL
TI Synthesis of hexafluoropropylene
IN Barnes, John James, Hockessin, DE, UNITED STATES
Kelch, Kenneth Paul, Washington, WV, UNITED STATES
Sandbrook, Thomas D., Mineral Wells, WV, UNITED STATES
Van Bramer, David John, Belpre, OH, UNITED STATES
PI US 2004002621 A1 20040101
AI US 2003-431407 A1 20030507 (10)
PRAI US 2002-391915P 20020626 (60)
DT Utility
FS APPLICATION
LREP E I DU PONT DE NEMOURS AND COMPANY, LEGAL PATENT RECORDS CENTER, BARLEY
MILL PLAZA 25/1128, 4417 LANCASTER PIKE, WILMINGTON, DE, 19805
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 456
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to the process of **pyrolyzing**
tetrafluoroethylene to **hexafluoropropylene** by carrying
out the **pyrolysis** in a tubular reactor that is **lined**
with either **nickel** or **nickel** alloy which contains no
greater than 8 wt % chromium.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

(FILE 'HOME' ENTERED AT 10:36:17 ON 16 JUL 2004)

FILE 'REGISTRY' ENTERED AT 10:36:41 ON 16 JUL 2004

L1 1 S CHLORODIFLUOROMETHANE/CN
L2 0 S 1-CHLORO-1,1,2,2-DIFLUOROETHANE/CN
L3 0 S 2-CHLORO-1,1,2,2-TETRAFLUOROETHANE/CN
L4 1 S 1-CHLORO-1,1,2,2-TETRAFLUOROETHANE/CN

FILE 'CAPLUS, USPATFULL, CA, CAOLD' ENTERED AT 10:39:47 ON 16 JUL 2004

L5 12103 S L1
L6 433 S L4
L7 318 S L5 AND PYROLY?
L8 45 S L6 AND PYROLY?
L9 0 S L7 AND SUPPORTED NICKEL
L10 0 S L8 AND SUPPORTED NICKEL
L11 7 S L7 AND REACTION ZONE
L12 5 S L8 AND REACTION ZONE
L13 3 S L11 AND NICKEL
L14 5 S L12 AND NICKEL
L15 3 DUP REM L13 (0 DUPLICATES REMOVED)
L16 4 S L14 NOT L15
L17 4 DUP REM L16 (0 DUPLICATES REMOVED)
L18 20 S L7 AND NICKEL
L19 11 S L8 AND NICKEL
L20 1 S L18 AND LINED?
L21 4 S L19 AND LINED?
L22 6 S L18 AND LIN?
L23 5 DUP REM L22 (1 DUPLICATE REMOVED)
L24 3 S L23 NOT L15
L25 3 S L24 NOT L17
L26 3 S L25 NOT L20
L27 3 S L21 NOT L15
L28 2 S L27 NOT L17
L29 1 DUP REM L28 (1 DUPLICATE REMOVED)
L30 17 S NICKEL-LINED PYROLYSIS
L31 0 S NICKEL-LINED PYROLYSIS REACTOR
L32 17 S L30 AND SUPPORTED
L33 1 S L17 AND PYROLYZING
L34 16 S L30 AND ?FLUORO?
L35 0 S L34 AND MECHANICALLY SUPPORTED
L36 0 S L34 AND ?CHLORO?
L37 16 S L34 NOT L15
L38 16 S L34 NOT L17
L39 16 S L38 NOT L27
L40 16 DUP REM L39 (0 DUPLICATES REMOVED)
L41 17 S NICKEL-LINED PYROLYSIS
L42 90 S NICKEL? (P) PYROLY? (P) ?FLUORO?
L43 18 S L42 AND SUPPORTED
L44 11 S L43 AND MECHANICALLY
L45 11 S L44 AND LIN?
L46 11 DUP REM L45 (0 DUPLICATES REMOVED)
L47 1 S L46 AND PYROLYZING
L48 10 S L46 NOT L47
L49 0 S L48 AND REACTOR
L50 0 S L48 AND REACTION ZONE
L51 0 S L48 AND RESIDENCE TIME
L52 8 S L48 AND TUBULAR
L53 8 S L52 AND CROSS-SECTION